It may be in order, in considering work ahead on the proposed chiropractic and basic science legislation, to again call attention to the valuable services which members of a woman's auxiliary are able to, and do, render. Component county societies that have no auxiliary are requested to write to the president of the Woman's Auxiliary to the California Medical Association, Mrs. Frederick N. Scatena, 1400 Forty-first Street, Sacramento, or to the state chairman on organization, Mrs. Harry O. Hund, 1304 Grand Avenue, San Rafael, either of whom will be happy to aid in the establishment of an auxiliary unit. It would be much to the advantage of organized and scientific medicine in California if every county medical society also had a county auxiliary.

Other State Association and Component County Society News.—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 254.

EDITORIAL COMMENT†

IMMUNOLOGIC STUDIES OF TRACHOMA VIRUS

Evidence that, in monkeys, recovery from trachoma is not due to the formation of circulating antibodies, nor to the development of a local tissue immunity, is currently reported by Julianelle[1] of the Oscar Johnson Institute, St. Louis, Missouri.

In order to test the possibility of the development of a local tissue insusceptibility to trachoma virus, the St. Louis ophthalmologist inoculated the conjunctivas of normal monkeys with virus-containing grattage material of human origin, and attempted reinfection with similar material from two weeks to three months after full recovery from the first infection. In their initial inoculations, eye lesions were usually demonstrable after an incubation period of about twelve days, and spontaneous recovery by the end of about 12.5 weeks. On reinoculation the average incubation period (11.6 days) and the average duration of the disease (13.1 weeks) were practically the same as in the initial test. No local immunity was demonstrable.

To test the possibility that spontaneous recovery in monkeys is due to the formation of circulatory antibodies, rabbits and monkeys were given from eight to twelve intravenous injections with grattage material. Ten days after the last injection their serums were tested for viruscidal properties. Mixtures of these presumably immune serums and grattage material were incubated at 37 degrees centigrade for 30 to 60 minutes, and then inoculated into the conjunctivas of normal monkeys, control inoculations being made with duplicate samples incubated with normal serums. No suggestion of either an increased or decreased infectivity was noted as a result of such neutralization tests, and the author concluded from such evidence that the trachoma virus is wholly nonantigenic for both rabbits and monkeys. Specific antibodies, however, were formed as a result of antigrattage immunizations, lysins and agglutinins for the human cells accompanying (or containing) the virus. But attempts to synergize or potentiate this apparently nonantigenic virus by the Burky technique were not made.

Confirming his negative results, the St. Louis experimenter found that the serums of trachoma patients contained no demonstrable trachomacidal factors, as determined by similar neutralization tests. No attempt, however, was made to test the virucidal action of the patients' leukocytes, either taken alone or in combination with serum.

His conclusion, that there is in monkeys neither a local nor a systemic immunity in experimental trachoma, leaves the phenomenon of spontaneous recovery in this animal species wholly unexplained. Determination of the presumptive local enzymic, hormonal or cytologic factor operative in this recovery may conceivably serve as a key to a successful therapy of numerous virus diseases.

Julianelle's work is of basic clinical interest, since it is such a clear-cut example of the limitations of current immunologic techniques. An entirely new method of experimental attack presumably will have to be devised.

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CULTIVATION OF FOWL CORYZA "GRANULES"

Cultivation of fowl coryza "bodies" in a cell-free medium, and proof of the pathogenicity of pure cultures of these "granules," are currently reported by Nelson[1] of the Rockefeller Institute. This proof is confirmatory evidence of the existence of an important group of infectious agents intermediary between bacteria and viruses—"subbacteria" or "supraviruses" almost invariably overlooked in routine clinical laboratory tests.

Three years ago Nelson[2] divided fowl coryza into two clinical types. First, there is the conventional acute type of the disease, characterized by an incubation period of about forty-eight hours. This rapid type is almost invariably associated with the presence of the fowl influenza bacillus, H. gallinarum, in the nasal discharges. Second, there is a much rarer, slow type of fowl coryza, in which the average incubation period is approximately sixteen days, and in which the fowl influenza bacilli are invariably absent. Nelson was able to carry this slow, nonbacterial type of the infection through twenty successive generations in susceptible birds by serial transfer of nasal discharge.

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comments by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California Medical Association to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

1 Julianelle, Louis A.: Am. J. Path., 15:279 (May), 1939.

1 Nelson, John B.: J. Exper. Med., 69:199 (Feb.), 1939.

2 Nelson, John B.: *Ibid.*, 63:515; 64:1749, 1936.